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What is Claimed is:

1. An apparatus for forming a multi fiber optical ferrule comprising:
a broach having a shaft, the broach comprising a contour formed along its outer
periphery and a cut out section extending transverse to the outer periphery to form a cutting
5 surface having the contour; and,
a carrier positioned under the cutting tool and movable thereunder to guide a work
piece along the cutting surface.
2. The apparatus of claim 1 wherein the broach may be sharpened by machining the
cut out surface.
- 10 3. The apparatus of claim 1 wherein the contour along the outer periphery is formed
by a plurality of plates applied on the shaft.
4. The apparatus of claim 3 wherein each of the plurality of plates has a edge profile
appropriately selected to form the contour.
5. A multi fiber ferrule for use in an optical connector comprising:
15 a first ferrule half having a contour formed on an inner surface thereof;
a second ferrule half having a complimentary contour formed on an inner surface
thereof;
a first window formed in the first ferrule half extending from the inner surface to
an outer surface;
20 a second window formed in a second ferrule half extending from the inner surface
thereof to an outer surface thereof; and,
joining means for securing the first and second ferrule halves together over a
multi fiber cable.

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6. The multi fiber ferrule as recited in claim 5 wherein the contour of the first ferrule half comprises a plurality of rectangular shaped channels each for receiving a respective fiber therein.

7. The multi fiber ferrule as recited in claim 6 wherein each rectangular shaped channel contacts a respective fiber at three locations.

8. The multi fiber ferrule as recited in claim 7 wherein an encapsulant is disposed in a space between the respective fiber and a corner of the channel.

9. The multi fiber ferrule as recited in claim 8 wherein the encapsulant extends along the respective fiber substantially covering a portion of the fiber that is stripped.

10. The multi fiber ferrule as recited in claim 5 wherein the contour of the first ferrule half comprises a plurality of rectangular channels each for receiving a guide pin.

11. The multi fiber ferrule according to claim 5 further comprising a plurality of fingers extending from side edges thereof beyond the inner surface.

12. The multi fiber ferrule according to claim 11 wherein the fingers of the first ferrule half fit into respective spaces in the second ferrule half.

13. The multi fiber ferrule according to claim 5 wherein the first and second ferrule halves are hermaphroditic.

14. The multi fiber ferrule according to claim 5 further comprising an outer sleeve surrounding the first and second ferrule halves.

15. A method of making an optical termination comprising the steps of:
providing a stripped multi fiber cable having a plurality of fibers exposed for termination;
machining along an inner surface of a blank to form a first fiber ferrule half;

machining along an inner surface of a blank to form a second fiber ferrule half;
placing the ribbon cable between the fiber ferrule halves; and,
securing the fiber ferrule halves together around the cable.

16. The method of making an optical termination as recited in claim 15 further
5 comprising the step of dipping the stripped multi fiber cable in epoxy before placing the ribbon
cable between the fiber ferrule halves.

17. The method of making an optical termination according to claim 15 further
comprising the step of applying an outer sleeve around the fiber ferrule halves to secure them to
each other.

10 18. The method of making an optical termination according to claim 15 further
comprising the step of injecting epoxy into a window of each fiber ferrule half.